What is claimed is:

1. A method of collecting system statistics in a telecommunications device, comprising:

generating a sequence of time intervals from a relative time reference;

gathering system statistics on a telecommunications device over the duration of each time interval; and

storing a summarized record of the telecommunications device system statistics for the time interval at the conclusion of each selected time interval.

2. The method of claim 1, further comprising:

receiving a system statistics report request; and

sending the requested system statistics to the requestor.

3. The method of claim 2, wherein sending the requested system statistics to the requestor further comprises adjusting the system statistics for reporting relative to an absolute clock reference with a time offset value.

4. The method of claim 3, wherein the time offset value is regenerated when the absolute time reference is changed.

5. The method of claim 1, wherein the time interval is 15 minutes or 10 minutes.

6. The method of claim 1, wherein the system statistics are selected from the group consisting of error seconds (ES), severely errored seconds (SES), unavailable seconds (UAS), code violation (CV), and Loss of Sync Word Second (LOSWS).

7. The method of claim 1, further comprising:

storing the system statistics of each time interval in a current 24 hour period; and

summarizing the system statistics of each time interval of past 24 hour periods into

a single system statistics report for the corresponding 24 hour period.

8. The method of claim 7, wherein the system statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the system statistics of a new time interval are gathered and stored.

9. The method of claim 1, further comprising:

storing the system statistics representing each time interval in a first storage stage structure of a plurality of storage stage structures, wherein each storage stage structure of the plurality of storage stage structures store time intervals that are of greater duration than the time interval stored in a previous storage stage structure; and

summarizing the system statistics of an oldest time interval of each storage stage structure at the end of a time interval of the storage stage into a system statistics report representing the greater duration time interval of a next storage stage structure; and

storing the system statistics representing the greater duration time interval in the next storage stage structure.

10. The method of claim 1, further comprising:

storing the system statistics of each time interval in a current 24 hour period;

summarizing the system statistics of an oldest time interval of past 24 hour periods into a system statistics report for a 1 hour time interval;

storing each system statistics report for a 1 hour time interval for a 48 hour period after the current 24 hour period;

summarizing the system statistics report for an oldest 1 hour time interval of the 48 hour period into a system statistics report for a 24 hour time interval; and

storing each system statistics report for a 24 hour time interval for a selected duration period after the current 48 hour period.

11. A method of collecting performance statistics in a G.SHDSL compatible device, comprising:

generating a sequence of time intervals from a relative time reference;

gathering performance statistics on a G.SHDSL compatible device over the duration of each time interval; and

storing a summarized record of the G.SHDSL compatible device performance statistics for the time interval at the conclusion of each selected time interval.

12. The method of claim 11, further comprising:

receiving a performance statistics report request; and

sending the requested system statistics to the requestor.

13. The method of claim 12, wherein sending the requested performance statistics to the requestor further comprises adjusting the performance statistics for reporting relative to an absolute clock reference with a time offset value.

14. The method of claim 13, wherein the time offset value is regenerated when the absolute time reference is changed.

15. The method of claim 11, wherein the time interval is 15 minutes or 10 minutes.

16. The method of claim 11, wherein the performance statistics are selected from the group consisting of error seconds (ES), severely errored seconds (SES), unavailable seconds (UAS), code violation (CV), and Loss of Sync Word Second (LOSWS).

17. The method of claim 11, wherein at least one performance statistic is gathered on a dataport selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

18. The method of claim 11, further comprising:

storing the performance statistics of each time interval in a current 24 hour period; and

summarizing the performance statistics of each time interval of past 24 hour periods into a single performance statistics report for the corresponding 24 hour period.

19. The method of claim 18, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

20. The method of claim 11, further comprising:

storing the performance statistics representing each time interval in a first storage stage structure of a plurality of storage stage structures, wherein each storage stage structure of the plurality of storage stage structures store time intervals that are of greater duration than the time interval stored in a previous storage stage structure; and

summarizing the performance statistics of an oldest time interval of each storage stage structure at the end of a time interval of the storage stage into a performance statistics report representing the greater duration time interval of a next storage stage structure; and

storing the performance statistics representing the greater duration time interval in the next storage stage structure.

21. The method of claim 11, further comprising:

storing the performance statistics of each time interval in a current 24 hour period;

summarizing the performance statistics of an oldest time interval of past 24 hour

periods into a performance statistics report for a 1 hour time interval;

storing each performance statistics report for a 1 hour time interval for a 48 hour period after the current 24 hour period;

summarizing the performance statistics report for an oldest 1 hour time interval of the 48 hour period into a performance statistics report for a 24 hour time interval; and

storing each performance statistics report for a 24 hour time interval for a selected duration period after the current 48 hour period.

22. A method of collecting performance statistics in a G.SHDSL modem, comprising:

generating a sequence of fifteen minute time intervals from a relative time reference;

gathering performance statistics on a G.SHDSL modem over the duration of each fifteen time minute interval;

storing a summarized record of the G.SHDSL compatible device performance statistics for each fifteen minute time interval at the conclusion of each selected time interval over a twenty four hour period; and

reporting the summarized record of one or more fifteen minute time intervals relative to a chronological time reference.

23. The method of claim 22, wherein at least one performance statistics are gathered on a dataport selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

24. The method of claim 22, further comprising:

storing the performance statistics of each time interval in a current 24 hour period; and

summarizing the performance statistics of each time interval of past 24 hour periods into a single performance statistics report for the corresponding 24

hour period.

25. The method of claim 24, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

26. The method of claim 22, wherein sending the requested performance statistics to the requestor further comprises adjusting the performance statistics for reporting relative to an absolute clock reference with a time offset value.

27. The method of claim 26, wherein the time offset value is regenerated when the absolute time reference is changed.

28. A telecommunications device, comprising:
at least one communication link interface;
a relative time reference clock;
a system statistics monitor, wherein the system statistics monitor gathers and stores statistics on the operation of the telecommunications device and the at least one communication link interface over the duration of a sequence of selected time intervals as defined by the relative time reference clock.

29. The telecommunications device of claim 28, wherein the telecommunications device receives and responds to a request for a system statistics report.

30. The telecommunications device of claim 29, wherein the telecommunications device adjusts the system statistics relative to an absolute clock reference with a time offset value.

31. The telecommunications device of claim 30, wherein the time offset value is regenerated when the absolute time reference is changed.

32. The telecommunications device of claim 28, wherein the time interval is 15 minutes or 10 minutes.

33. The telecommunications device of claim 28, wherein the system statistics are selected from the group consisting of error seconds (ES), severely errored seconds (SES), unavailable seconds (UAS), code violation (CV), and Loss of Sync Word Second (LOSWS).

34. The telecommunications device of claim 28, wherein the telecommunications device stores the system statistics of each time interval in a current 24 hour period, and summarizes the system statistics of each time interval of past 24 hour periods into a single system statistic report for the corresponding 24 hour period.

35. The telecommunications device of claim 34, wherein the system statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the system statistics of a new time interval are gathered and stored.

36. The telecommunications device of claim 28, wherein the telecommunications device has a G.SHDSL dataport.

37. A G.SHDSL communications device, comprising:
at least one communication link interface;
a relative time reference clock;
a performance statistics monitor, wherein the performance statistics monitor gathers and stores performance statistics on the operation of the G.SHDSL

communications device and the at least one communication link interface over the duration of a sequence of selected time intervals as defined by the relative time reference clock.

38. The G.SHDSL communications device of claim 37, wherein the telecommunications device receives and responds to a request for a performance statistics report.

39. The G.SHDSL communications device of claim 38, wherein the telecommunications device adjusts the performance statistics relative to an absolute clock reference with a time offset value.

40. The G.SHDSL communications device of claim 39, wherein the time offset value is regenerated when the absolute time reference is changed.

41. The G.SHDSL communications device of claim 37, wherein the time interval is 15 minutes or 10 minutes.

42. The G.SHDSL communications device of claim 37, wherein the performance statistics are selected from the group consisting of error seconds (ES), severely errored seconds (SES), unavailable seconds (UAS), code violation (CV), and Loss of Sync Word Second (LOSWS).

43. The G.SHDSL communications device of claim 37, wherein the telecommunications device stores the performance statistics of each time interval in a current 24 hour period, and summarizes the performance statistics of each time interval of past 24 hour periods into a single system statistic report for the corresponding 24 hour period.

44. The G.SHDSL communications device of claim 43, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

45. The G.SHDSL communications device of claim 37, wherein at least one performance statistic is gathered on a dataport selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

46. A G.SHDSL modem, comprising:
a G.SHDSL communication link interface;
a relative time reference clock;
a performance statistics monitor, wherein the performance statistics monitor gathers and stores summarized performance statistics on the operation of the G.SHDSL modem and the G.SHDSL communication link interface over the duration of a sequence of fifteen minute time intervals in a twenty four hour period as defined by the relative time reference clock.

47. The G.SHDSL modem of claim 46, wherein the telecommunications device receives and responds to a request for a performance statistics report.

48. The G.SHDSL modem of claim 47, wherein the telecommunications device adjusts the performance statistics relative to an absolute clock reference with a time offset value.

49. The G.SHDSL modem of claim 48, wherein the time offset value is regenerated when the absolute time reference is changed.

50. The G.SHDSL modem of claim 46, wherein the telecommunications device stores

the performance statistics of each time interval in a current 24 hour period, and summarizes the performance statistics of each time interval of past 24 hour periods into a single system statistic report for the corresponding 24 hour period.

51. The G.SHDSL modem of claim 50, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

52. The G.SHDSL modem of claim 46, wherein at least one performance statistic is gathered on a dataport selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

53. A machine-usable medium having machine readable instructions stored thereon for execution by a processor of a telecommunications device to perform a method comprising:
generating a sequence of time intervals from a relative time reference;
gathering performance statistics on a telecommunications device over the duration of each time interval; and
storing a summarized record of the telecommunications device performance statistics for the time interval at the conclusion of each selected time interval.

54. The machine-usable medium of claim 53, wherein at least one performance statistics are gathered on a dataport the telecommunications device selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

55. The machine-usable medium of claim 53, further comprising:
storing the performance statistics of each time interval in a current 24 hour period; and

summarizing the performance statistics of each time interval of past 24 hour periods into a single performance statistics report for the corresponding 24 hour period.

56. The machine-usable medium of claim 55, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

57. The machine-usable medium of claim 53, wherein sending the requested performance statistics to the requestor further comprises adjusting the performance statistics for reporting relative to an absolute clock reference with a time offset value.

58. The machine-usable medium of claim 57, wherein the time offset value is regenerated when the absolute time reference is changed.

59. In a telecommunications device having at least one communication link interface, a relative time reference clock, and a performance statistics monitor, a performance statistics monitor method, comprising:

generating a sequence of time intervals from a relative time reference;

gathering performance statistics on a telecommunications device over the duration of each time interval; and

storing a summarized record of the telecommunications device performance statistics for the time interval at the conclusion of each selected time interval.

60. The telecommunications device of claim 59, wherein at least one performance statistics are gathered on a dataport the telecommunications device selected from the group consisting of a V.35 dataport, a E1 dataport, and a G.SHDSL dataport.

61. The telecommunications device of claim 59, further comprising:

storing the performance statistics of each time interval in a current 24 hour period; and

summarizing the performance statistics of each time interval of past 24 hour periods into a single performance statistics report for the corresponding 24 hour period.

62. The telecommunications device of claim 61, wherein the performance statistics for an oldest time interval of the current 24 hour period is added to a previous 24 hour systems statistics summary when the performance statistics of a new time interval are gathered and stored.

63. The telecommunications device of claim 59, wherein sending the requested performance statistics to the requestor further comprises adjusting the performance statistics for reporting relative to an absolute clock reference with a time offset value.

64. The telecommunications device of claim 63, wherein the time offset value is regenerated when the absolute time reference is changed.